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ABSTRACT

Intended for administrators and policymakers as well as teachers, this digest explores researchers' current understanding of English spelling and its acquisition as the basis for spelling instruction methods other than memorization. After defining spelling and the relationship between spoken English and its written system, the digest explores how spelling ability develops in children. It then discusses the implications of spelling acquisition for classroom instruction. The digest concludes with a list of suggested readings, in which in-depth discussion of points brought out in the digest can be found. (HTH)

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ERIC Digest

Spelling

Richard F. Hodges

Spelling instruction in American schools has traditionally proceeded on the basis that memorization of needed words is the most productive route to spelling ability. Indeed, spelling as a school subject has long been regarded by society as a subject whose mastery symbolizes the values that diligence and hard work play in achievement. This view of spelling reinforces the belief that memorization is not only a necessary but an appropriate means of acquiring spelling skills.

However, recent findings of researchers who have studied how children learn to spell, together with new views of the nature of the English writing system, suggest additional ways in which spelling can be taught. The following is a brief accounting of our current understanding of English spelling and its acquisition. A list of suggested readings is provided in which in-depth discussion of points brought out in this digest will be found.

What is Spelling?

Spelling is the process of converting oral language to visual form by placing graphic symbols on some writing surface. Because writing systems, or orthographies, are inventions, they can and do vary with respect to how a particular language is graphically represented. (Chinese, for example, use a system of graphic characters that represent complete words or ideas.) The predominant kind of writing system used in a majority of the

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world's languages, however, is alphabetic in structure; that is, the graphemes, or graphic (visual) characters, represent speech sounds, ideally with a unique grapheme for each speech sound. English orthography is based on this principle But, on the surface, at least, our written code appears to be erratic, even untrustworthy, in its relationship to the spoken language. As a result, mastering English spelling has been regarded as an unnecessarily time-consuming and arduous task.

In the past several years, however, linguists and others interested in English orthography have helped to clarify the actual relationship between our writing system and the spoken language. Their studies have revealed that English orthography, while appearing quite irregular on the surface, is considerably more logical than it appears when examined at deeper, more complex, levels of language. Their work reveals that such factors as the relationships among letters within words, how prefixes and suffixes are appended to roots, and how words that are related in meaning remain related in spelling despite sound changes (e.g., derive - derivative - derivation) are fundamental properties of the orthography.

How is Spelling Ability Developed?

Just as there have been significant gains in our knowledge of English orthography, so also do we now better understand the nature of spelling ability from studies of how young children learn to spell.

One of the first major studies to examine how children begin to learn to spell was conducted by Charles Read, a linguist now at the University of Wisconsin (Read 1971, 1975a, 1975b). Read looked at the ways in which children four to eight years old used their knowledge of English phonology (the sounds in spoken English) to spell words. Among his subjects were approximately

twenty preschoolers who were able to identify and name the letters of the alphabet and to relate the letter names to the sounds of words. These children then "invented" spellings for words that they wrote or constructed by arranging movable letters. Read found that even at an early age children are able to detect the phonetic characteristics of words that English spelling represents. More interesting, although these young children misspelled most of the words they attempted, with minor variation they misspelled the words in the same ways. For example, childrentypically spelled the sounds of words with the alphabet letters whose names were like those sounds: bot for boat, fas for face, lade for lady.

What Read's seminal work disclosed was that children, even very young children, try to make sense of the world around them by using the information that is available to them; in this instance they applied their intuitive knowledge of the sound structure of English to spelling. Moreover, Read demonstrated that the judgments of children about relationships between speech and writing are qualitatively different from those made by adults. In short, learning to write, like learning to speak, is a developmental process.

But what about the spelling strategies of older students? One examination of spelling development among youngsters in later school years was undertaken by Shane Templeton (1979). To determine the extent to which knowledge of graphic structure contributes to spelling ability, he studied the abilities of sixth-, eighth-, and tenth-graders to construct and spell derived forms of real and nonsense words. Templeton found considerable evidence that spelling ability does not rely solely on skills for relating sound and spelling, nor upon rote memory. Rather, both phonological knowledge and visual knowledge about words are brought into play when older students spell, the visual knowledge having been acquired, of course, only from extensive prior experiences with reading and writing.

These observations do not refute the fact that word memory plays an important role in spelling ability. But, just as we now know more about the complex structure of our written code, we also now know that spelling ability involves more than a memory of the spelling of individual words. Researchers' observations reveal that spelling ability is a developmental achievement gained through interaction over time with the orthography in both writing and reading. With experience, children learn much about the general structural properties of English words--about their sounds, graphemes, roots, affixes, and so on. Learning to spell, in short, involves learning about words over a long duration and in a variety of contexts.

Implications for Instruction

Among the several important insights that have been gained about the nature of spelling ability, perhaps the most important is the realization that this ability involves more than word memory skills. Learning to spell involves learning about written language in everyday use and the about interrelationships of components of words as reflected in the orthography. We need to be aware that students contribute actively to their own learning. Accordingly, we need to provide them with numerous and frequent opportunities to explore English spelling in the context of daily writing and reading activities. Although formal spelling study has a legitimate place in the school curriculum, every interaction with written language both in and out of spelling class provides students with opportunities to gain new information about the structure and uses of the written code. The foundation of spelling instruction is the study of written language itself.

For Further Reading

Bissex, Glenda L. Gnys at Wrk: A Child Learns to Read and Write. Cambridge, Mass.: Harvard University, 1981.

Chomsky, Noam and Halle, Morris. The Sound Pattern of English. New York: Harper and Row, 1968. (ERIC Document Reproduction Service, ED 020 511)

Frith, Uta (ed.). Cognitive Processes in Spelling. London and New York: Academic Press, 1980.

Hanna, Paul R.; Hanna, Jean S.; Hodges, Richard E.; and Rudorf, Erwin H.; Phoneme-Grapheme Correspondences as Cues to Spelling Improvement. Washington, D.C.: Government Printing Office, U.S. Office of Education, 1966. (ERIC Document Reproduction Service, ED 003 321)

Henderson, Edmund H. Learning to Read and Spell: The Child's Knowledge of Words. DeKalb, Ill.: Northern Illinois University Press, 1981.

Hodges, Richard E. Learning to Spell. Theory and Research Into Practice. Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills and the National Council of Teachers of English, 1981. (ERIC Document Reproduction Service, ED 202 016)

Hodges, Richard E. Improving Spelling and Vocabulary in the Secondary School. Theory and Research Into Practice. Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills and the National Council of Teachers of English, 1982. (ERIC Document Reproduction Service, ED 218 645)

Read, Charles. Children's Categorization of Speech Sounds in English. National Council of Teachers of English Report No. 17. Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills and the National Council of Teachers of English, 1975. (ERIC Document Reproduction Service, ED 112 426)

Read, Charles, and Hodges, Richard E.; "Spelling," in Encyclopedia of Educational Research, 5th Edition. Harold Metzel (ed.). New York: MacMillan Company, 1983, pp. 1758-1767.

Templeton, Shane. "Spelling First, Sound Later: The Relationship between Orthography and Higher Order Phonological Knowledge in Older Students." Research in the Teaching of English 13 (October 1979): 255-64.

Venezky, Richard L., "English Orthography: Its Graphical Structure and Its Relation to Sound," Reading Research Quarterly, 2(Spring 1967), 75-102.

Books Containing Word Games

Ayers, Donald M. English Words from Latin and Greek Elements. Tucson: University of Arizona Press, 1965.

Borgmann, Dmitri A. Beyond Language. New York: Charles Scribner's Sons, 1967.

Borgmann, Dmitri A. Language on Vacation. New York: Charles Scribner's Sons, 1965.

Brandreth, Gyles. The Joy of Lex: How to Have Fun with 860,341,500 Words. New York: William Morrow, 1980.

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Carter, Candy, and Rashkis, Zora, eds. Ideas for Teaching English in the Junior High and Middle School. New Edition. Urbana, Ill.: National Council of Teachers of English, 1980. (ERIC Document Reproduction Service, ED 193 672)

Dale, Edgar, and O'Rourke, Joseph. Techniques of Teaching Vocabulary. Palo Alto, Calif.: Field Educational Publications, 1971.

Espy, Willard R. An Almanac of Words at Play. New York: Clarkson N. Potter, 1975.

Espy, Willard R. Another Almanac of Words at Play. New York: Clarkson N. Potter, 1980.

Espy, Willard R. The Game of Words. New York: Grosset and Dunlap, 1972.

Grant, Niels, Jr. Word Games. Belmont, Calif.: Fearon Publications, 1971.

Hodges, Richard E. (See two citations in previous list.)

Hurwitz, Abraham B., and Goddard, Arthur. Games to Improve Your Child's English. New York: Simon and Schuster, 1969. (ERIC Document Reproduction Service, ED 038 409)

Mulac, Margaret E. Educational Games for Fun. New York: Harper and Row Publishers, 1971.

Reader's Digest Editors, eds. Word Power. New York: Berkley Books, 1980.

Shipley, Joseph T. Word Play. New York: Hawthorn Books, 1972.

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Hanna, Paul R., Jean S. Hanna, Richard E. Hodges, and Erwin H. Rudorf. *Phoneme-Grapheme Correspondences as Cues to Spelling Improvement.* Washington, D.C.: Government Printing Office, U.S. Office of Education, 1966. ED 003 321.

Henderson, Emund H. *Learning to Read and Spell: The Child's Knowledge of Words.* DeKalb, Ill.: Northern Illinois University Press, 1981.

Hodges, Richard E. *Learning to Spell.* Theory and Research Into Practice. Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills and National Council of Teachers of English, 1981. ED 202 016.

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Read, Charles. *Children's Categorization of Speech Sounds in English.* National Council of Teachers of English Research Report No. 17. Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills and National Council of Teachers of English, 1975. ED 112 426.

Read, Charles, and Richard E. Hodges. "Spelling." In *Encyclopedia of Educational Research,* 5th ed., edited by Harold Metzel. New York: Macmillan, 1983, 1758–67.

Templeton, Shane. "Spelling First, Sound Later: The Relationship between Orthography and Higher Order Phonological Knowledge in Older Students." *Research in the Teaching of English* 13 (October 1979): 255–64.

Venezky, Richard L., "English Orthography: Its Graphical Structure and Its Relation to Sounds," *Reading Research Quarterly* 2 (Spring 1967): 75–102.

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Brandreth, Gyles. *The Joy of Lex: How to Have Fun with 860,341,500 Words.* New York: William Morrow, 1980.

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Espy, Willard R. *Another Almanac of Words at Play.* New York: Clarkson N. Potter, 1980.

Espy, Willard R. *The Game of Words.* New York: Grosset and Dunlap, 1972.

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Hodges, Richard E. (See two citations in previous list.)

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Mulac, Margaret E. *Educational Games for Fun.* New York: Harper and Row, 1971.

Reader's Digest Editors. *Word Power.* New York: Berkley Books, 1980.

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